

Figure 1. Torque vs. Time Chart for Reactive Extrusion of PHBV with HEMA

TQ: 0-20 Nm

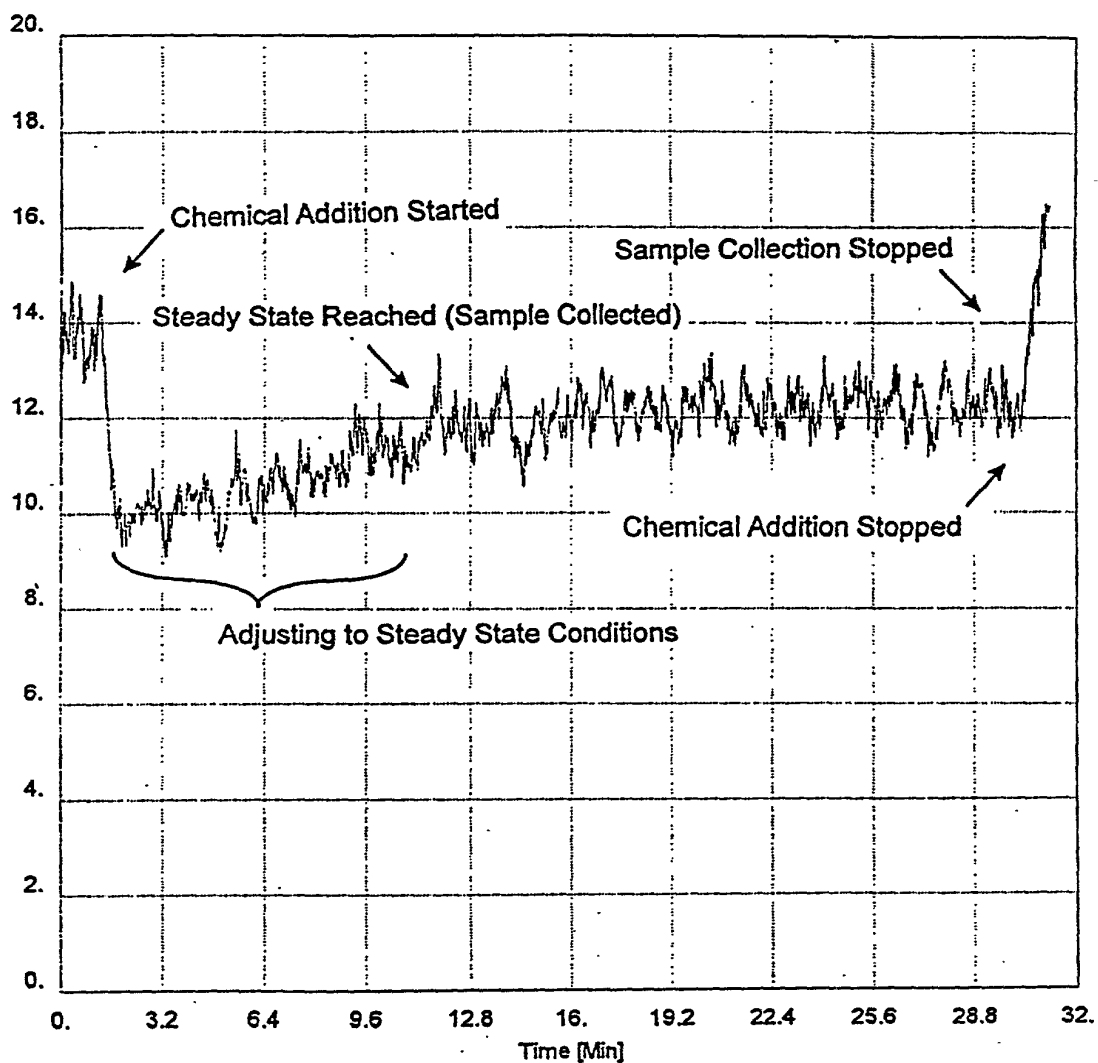


Figure 2. Proton NMR Spectra for PHBV and HEMA Grafted PHBV

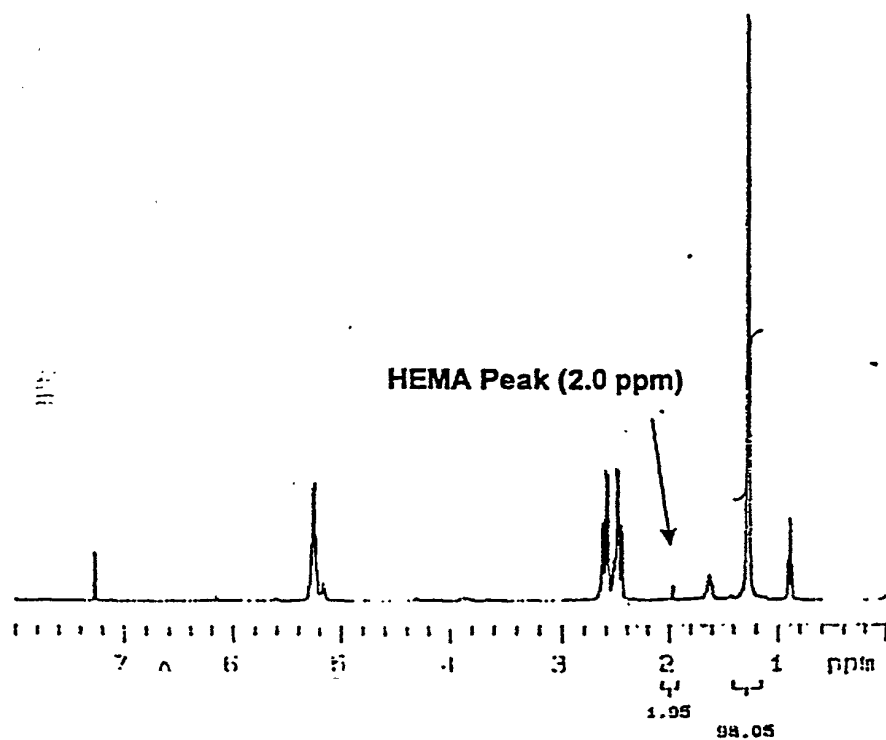
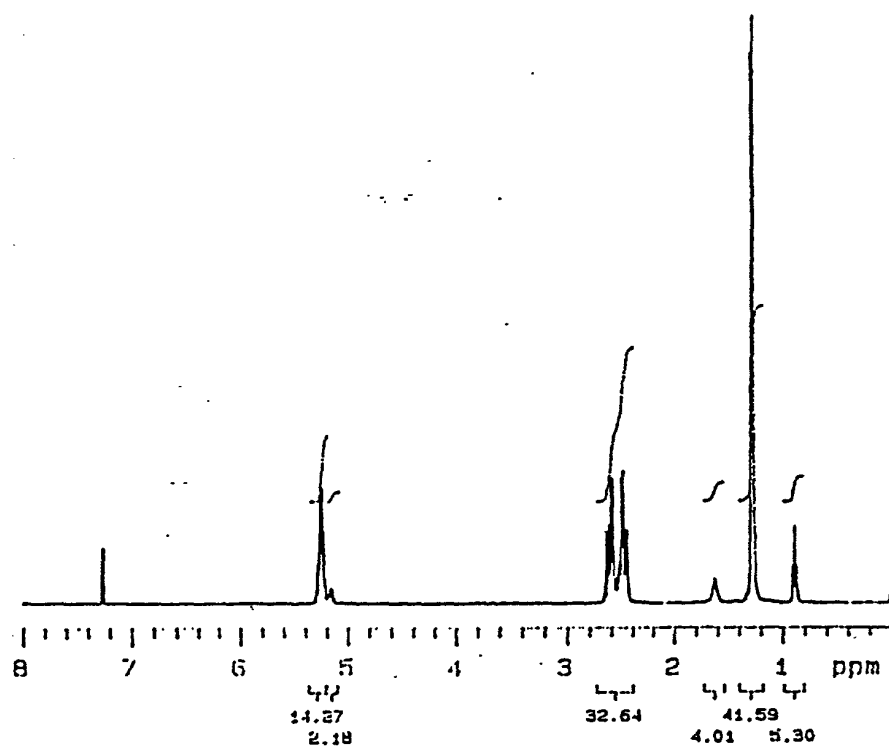


Figure 3 Melt Rheology at 180°C for PHBV and HEMA Grafted PHBV

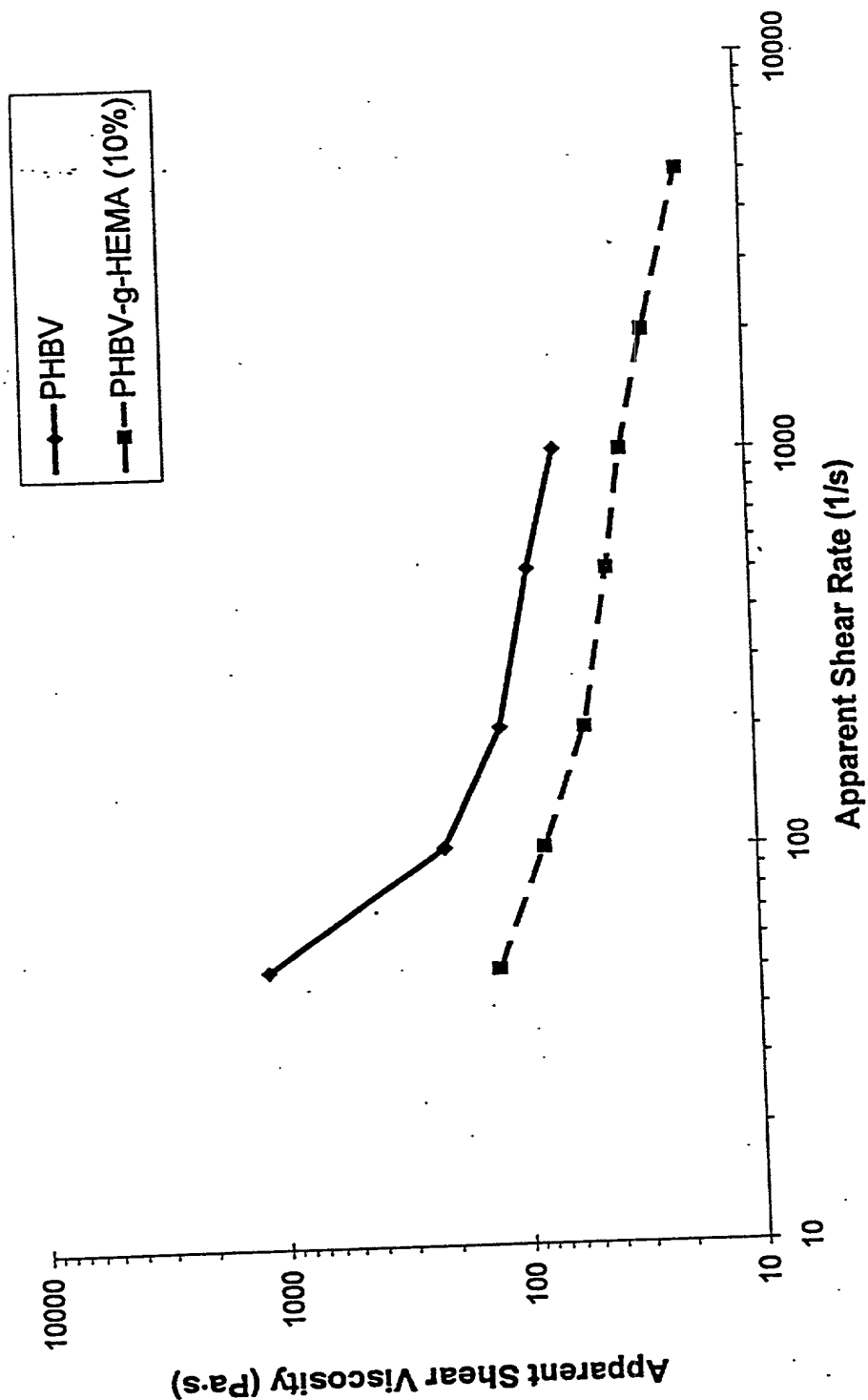
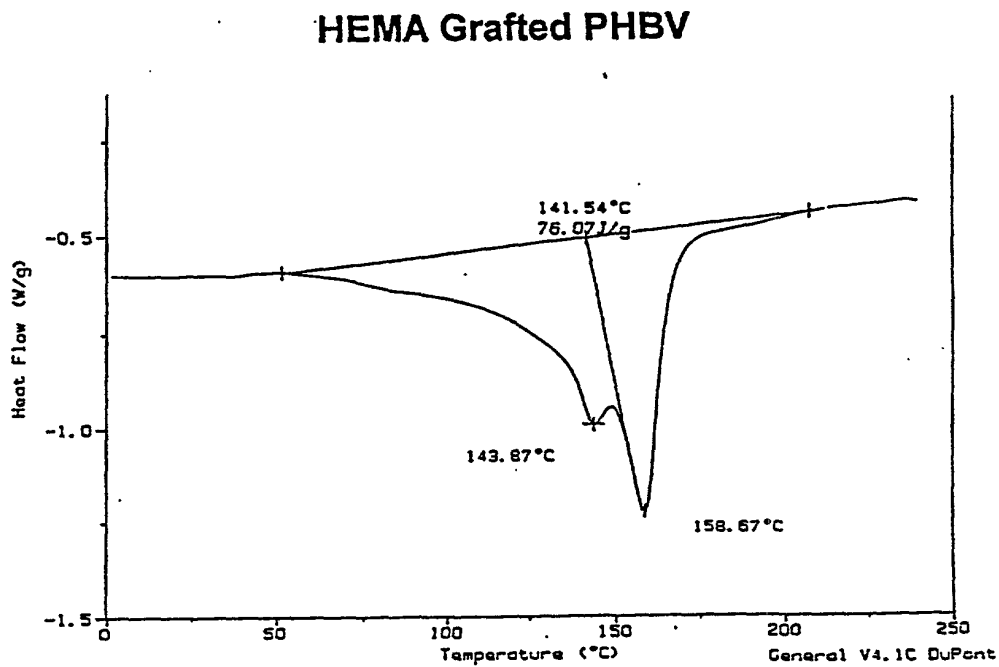
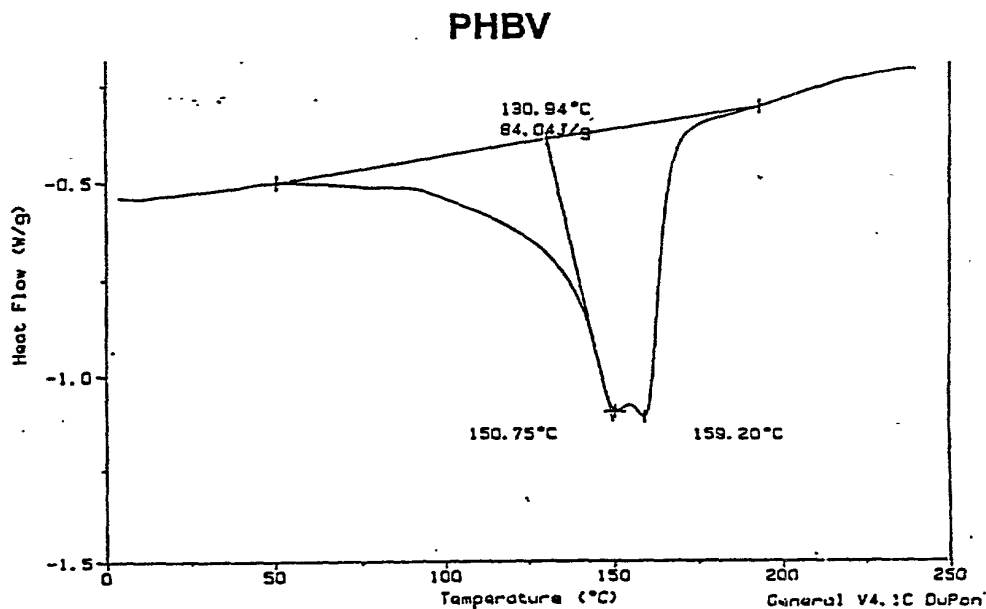


Figure 4 DSC Thermogram for PHBV and HEMA Grafted PHBV



005221 9705460

JUN - 0

Figure 5 Torque vs. Time Chart for Reactive Extrusion of PBS 1040 with PEGMA on the Haake Extruder

TQ: 0-1500 m-g

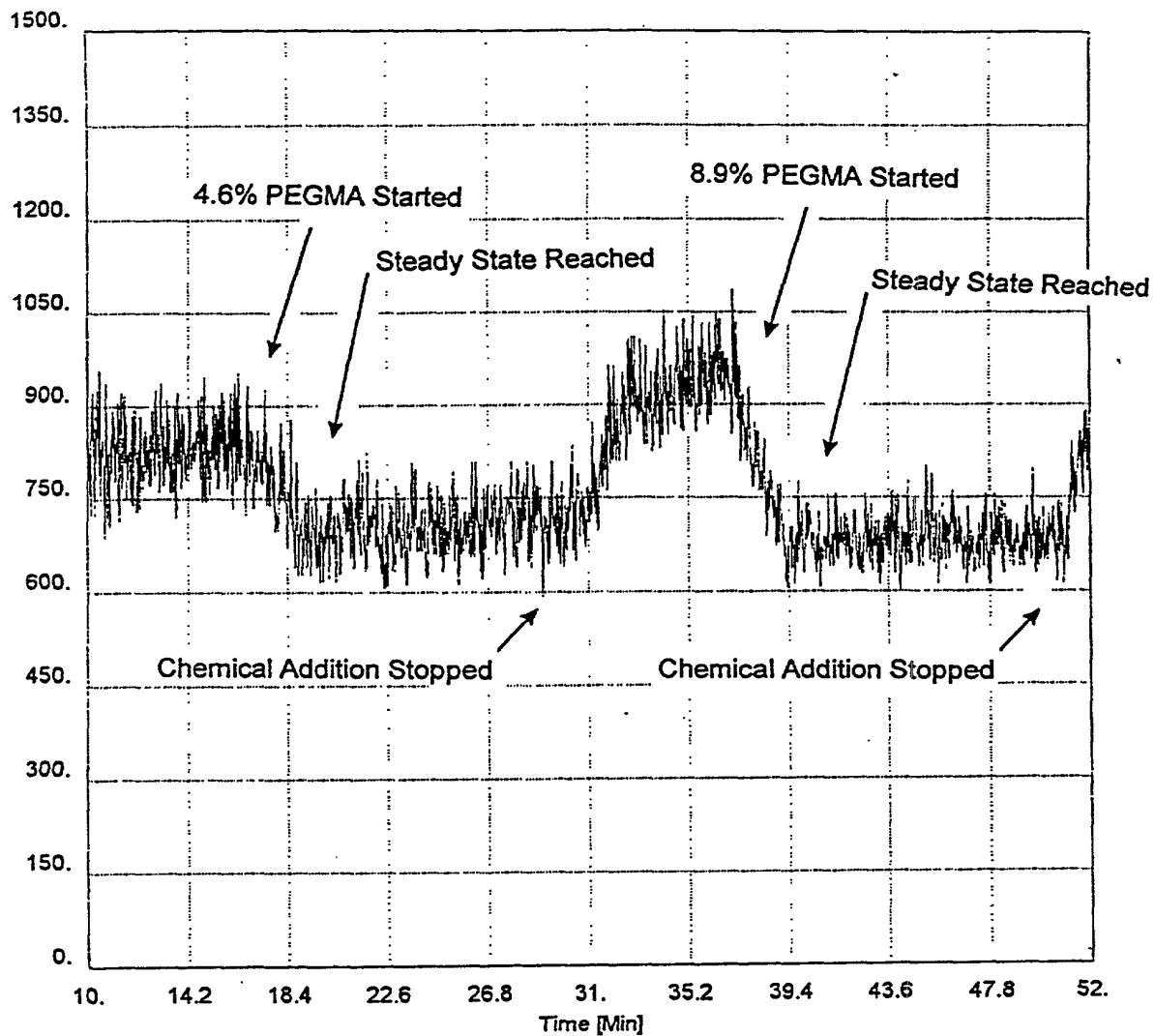


Figure 6 Proton NMR Spectra for PBS and PEGMA Grafted PBS 1040

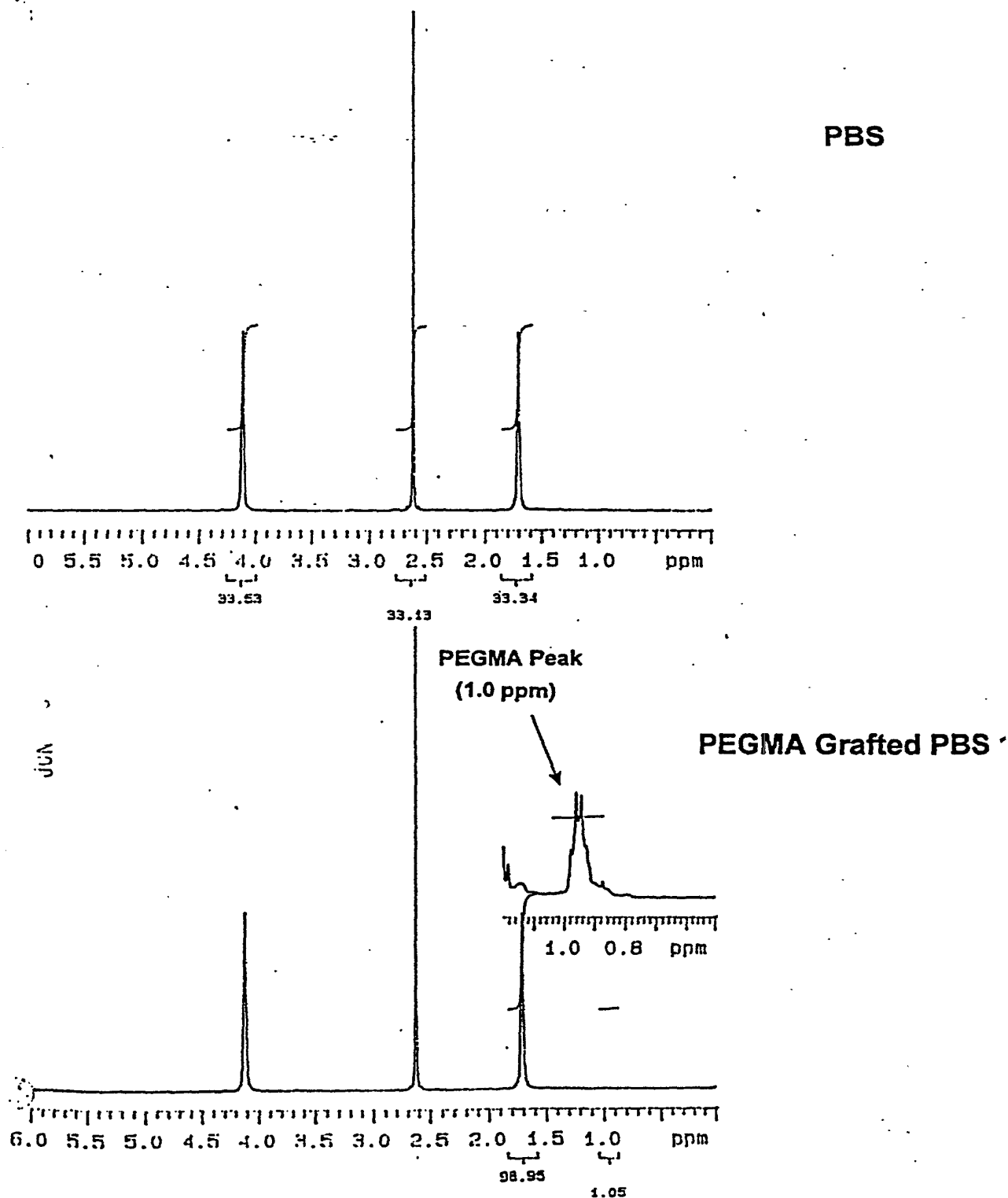


Figure 7 Melt Rheology at 180°C for PBS and PEGMA Grafted PBS (Bionolle® 1040)

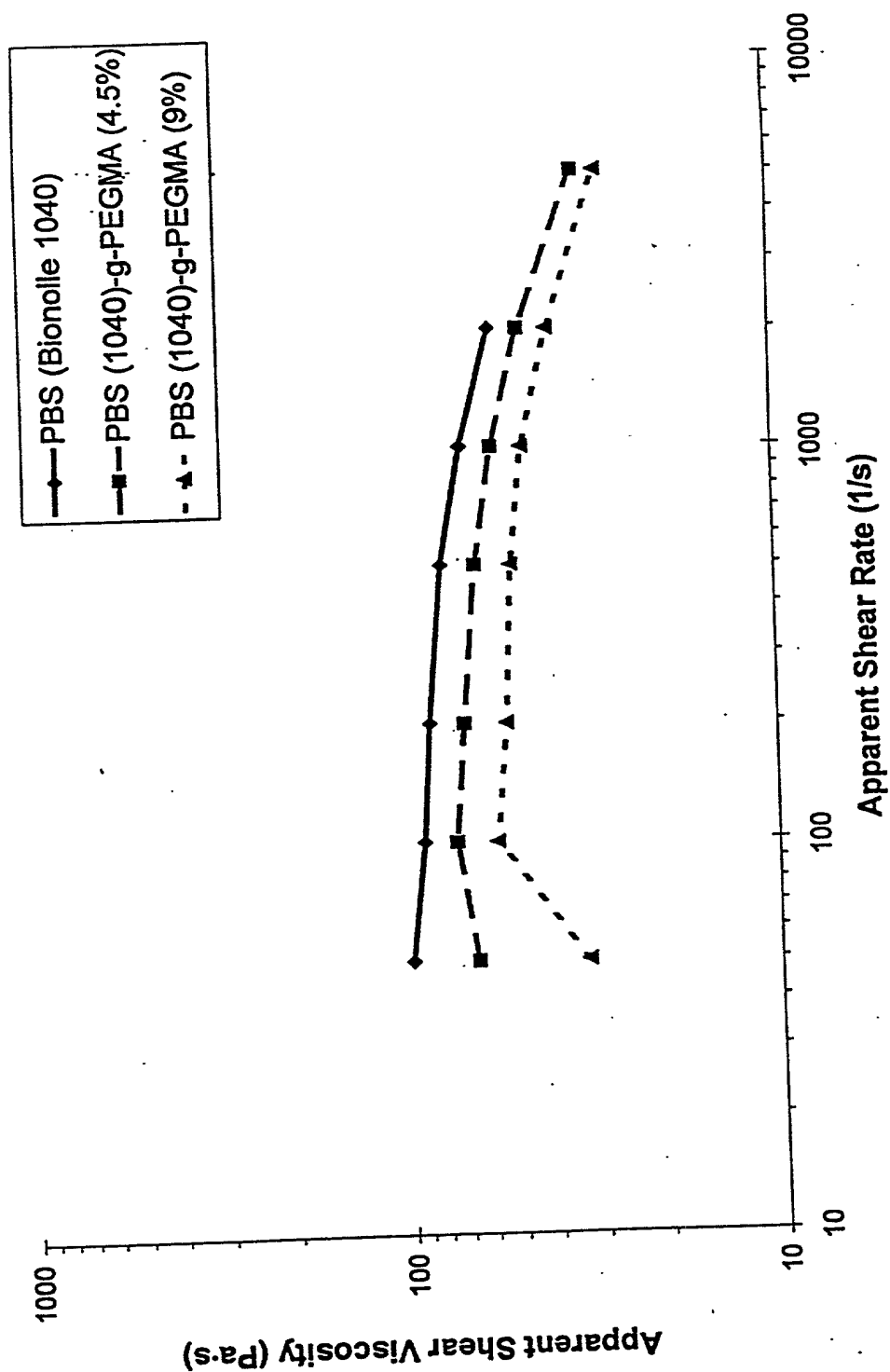


Figure 8 Melt Rheology at 180°C for PBS and HEMA Grafted PBS (Bionolle® 1020)

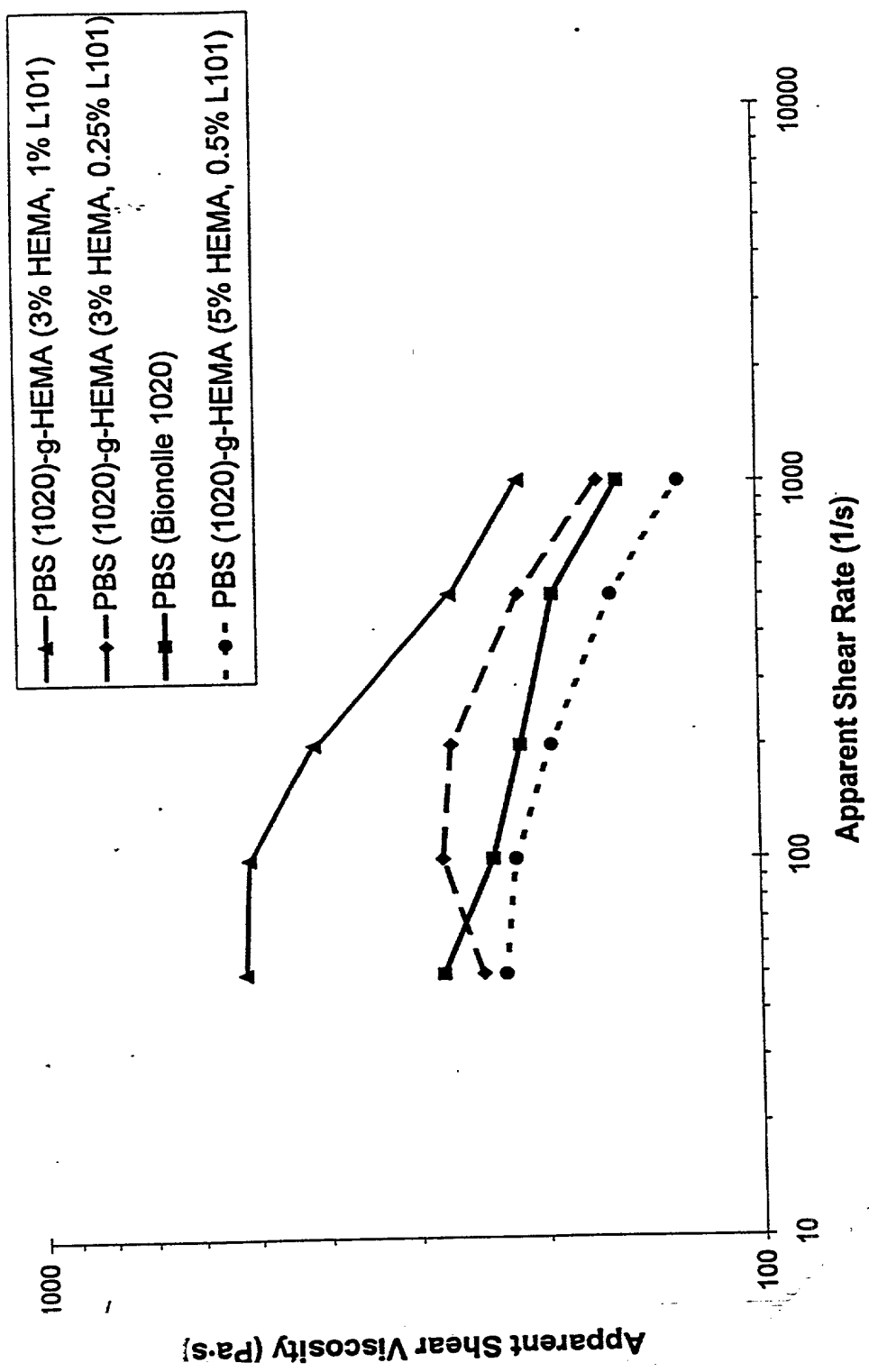
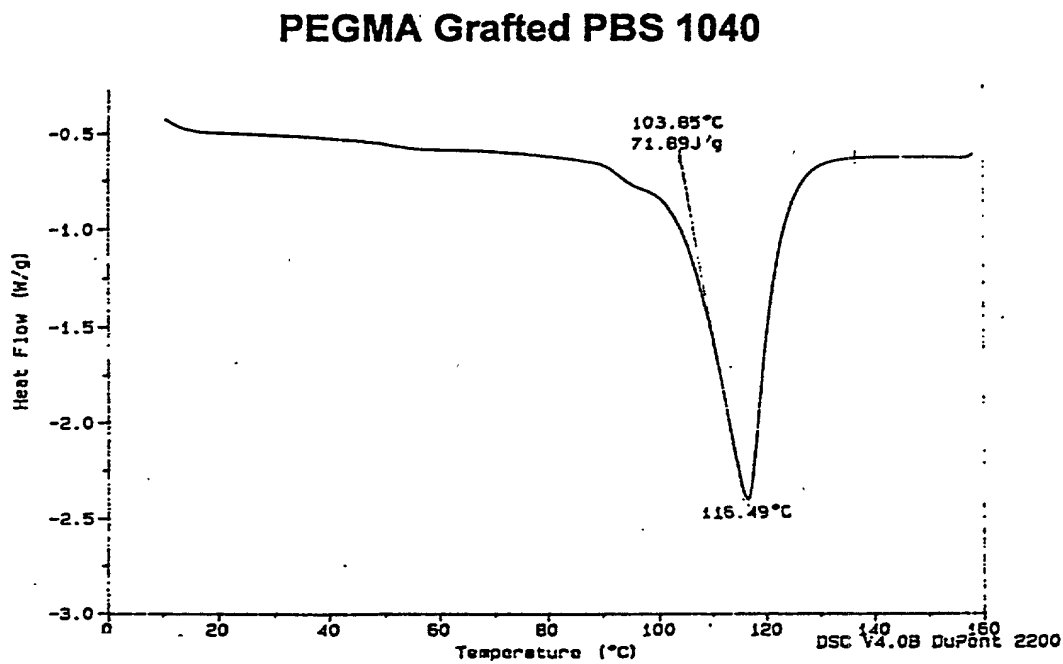
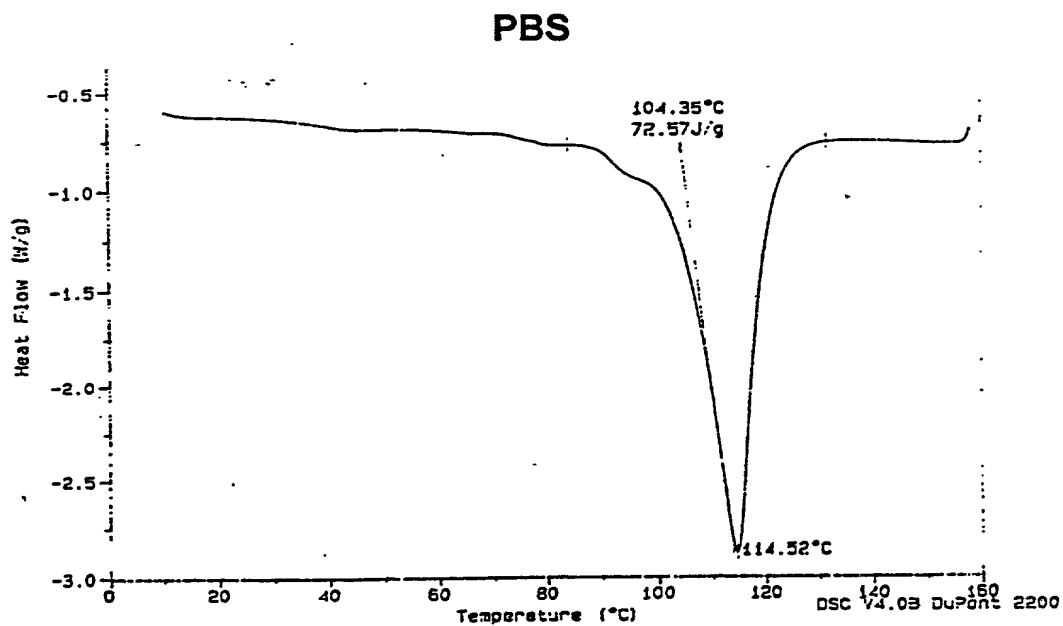




Figure 9 DSC Thermogram for PBS and PEGMA Grafted PBS 1040



006221 9/05/5/50

Figure 10 DSC Thermogram for PBS and HEMA Grafted PBS 1020

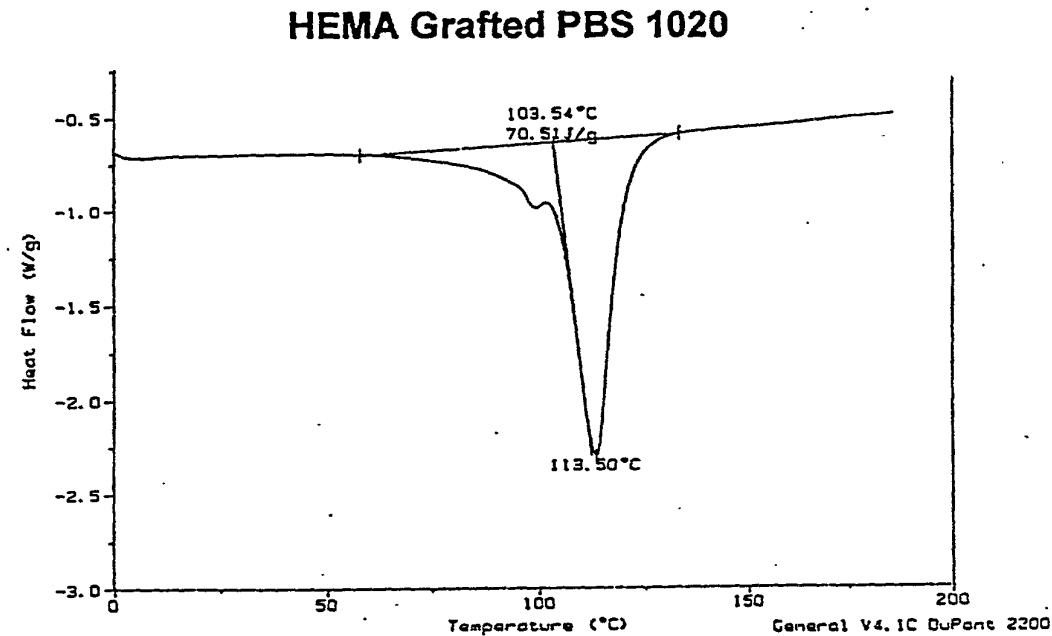
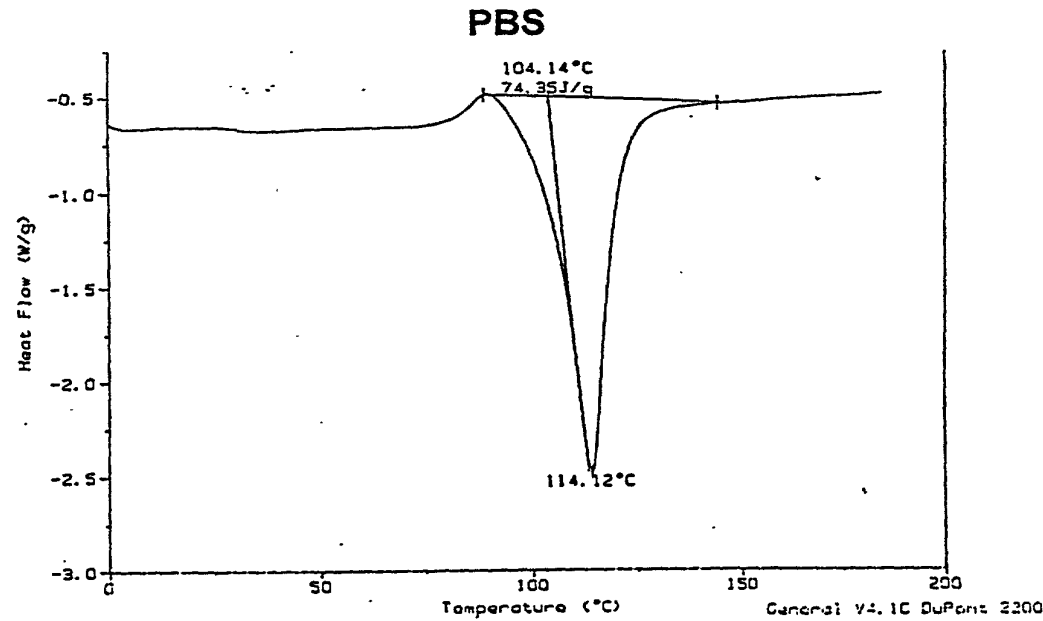


Figure 11



Figure 12

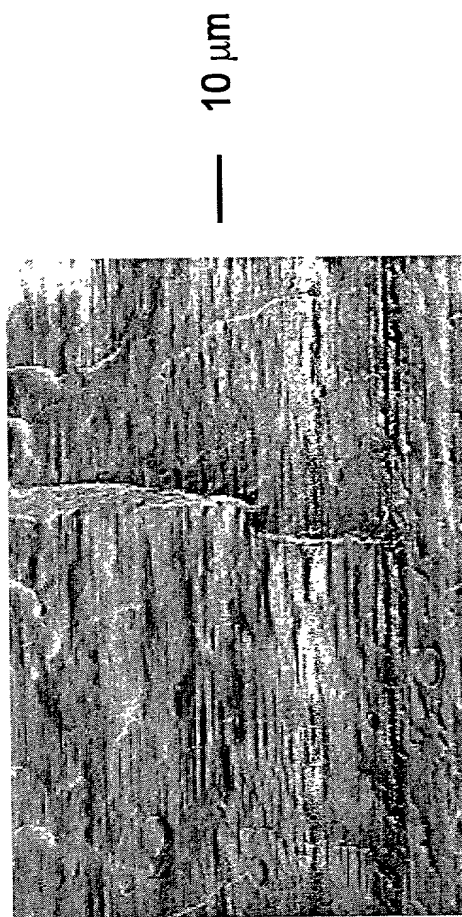
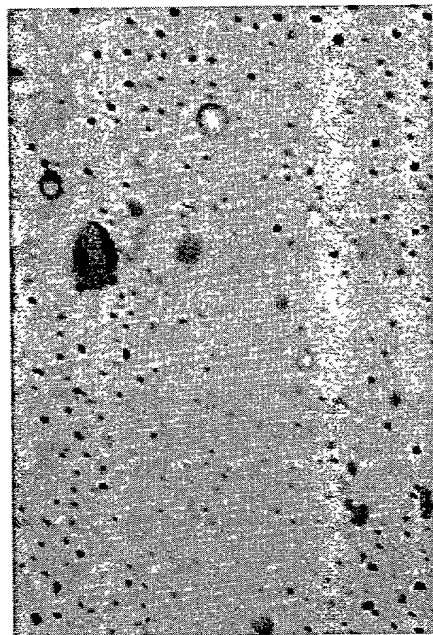


Figure 13



— 10  $\mu$ m

Figure 14

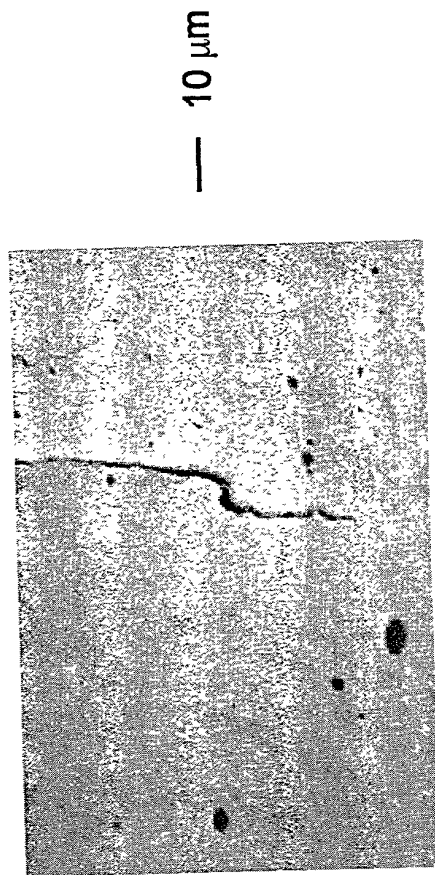


Figure 15  
 $T_m$  of PEO Phase of Reactive Blends

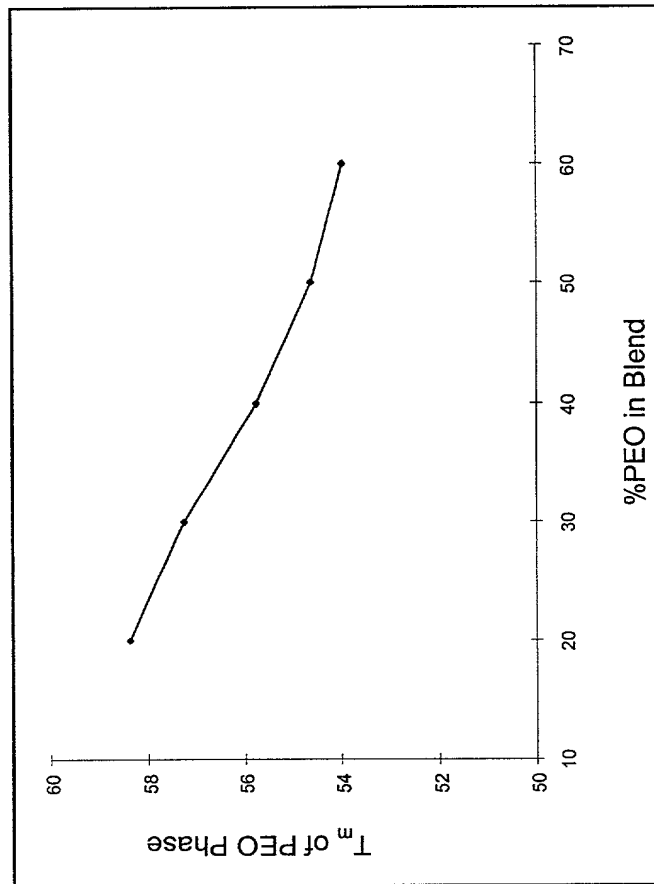


Figure 16

$\Delta T_m \approx T_m$  (PEO Phase of Physical Blends) -  $T_m$  (Reactive Blends)

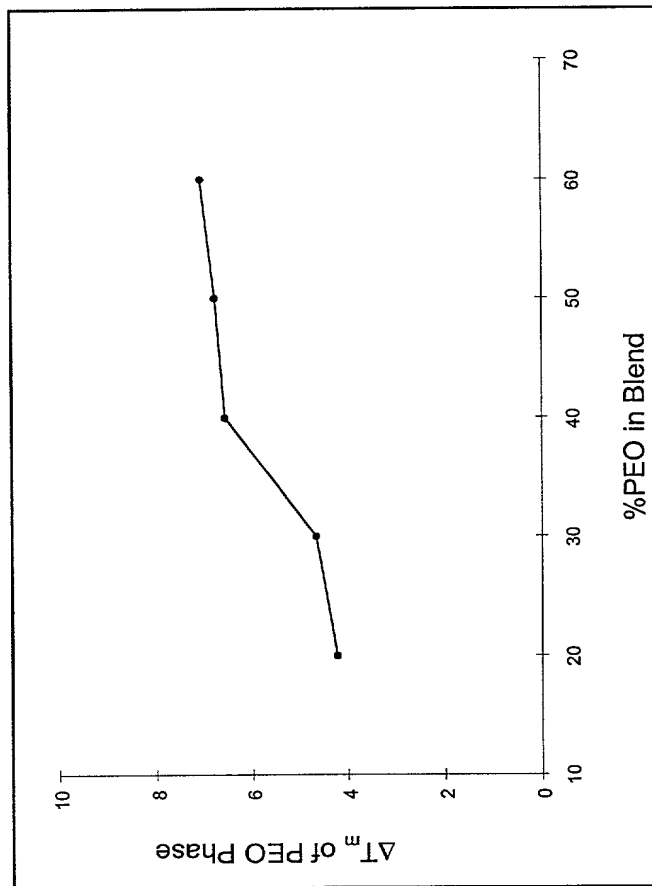
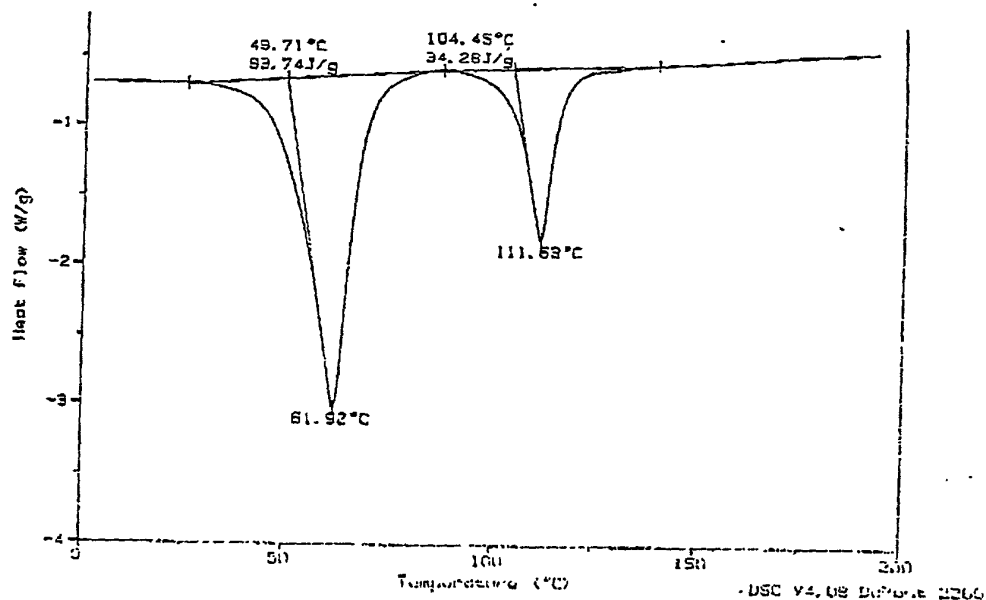




Figure 17 DSC Thermograms for PBS/PEO Physical and Reactive Blends

### 30/70 PBS/PEO Physical Blend



### 30/70 PBS/PEO Reactive Blend

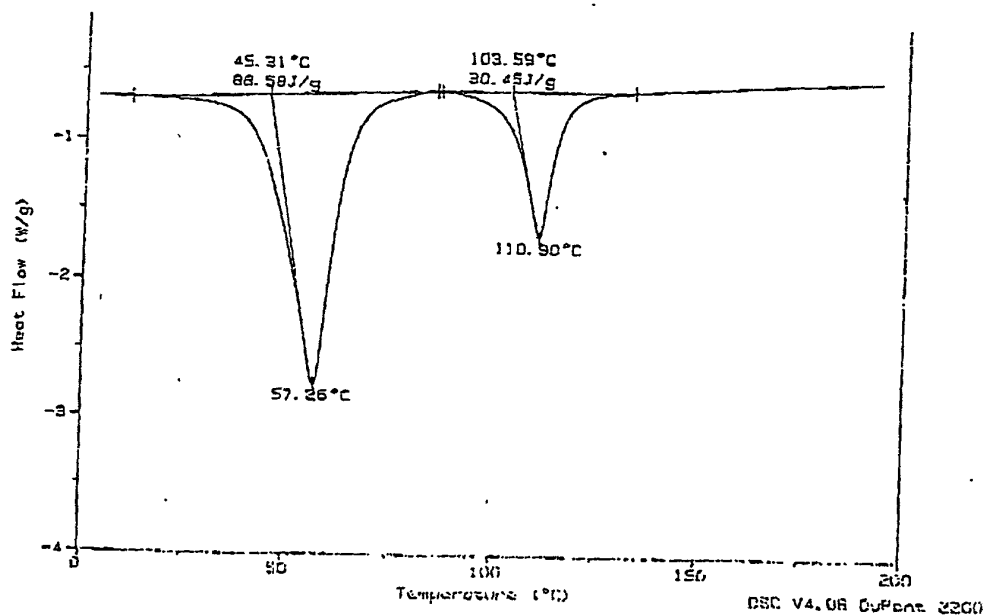


Figure 18 Melt Rheology at 195°C for PBS/PEO Physical and Reactive Blends

